Actuator LA30
Data sheet
LA30 is a powerful actuator yet small enough to fit most applications. The actuator can be supplied with options such as built-in potentiometer for servo operation or an extra powerful motor for increased speed and strength (S-motor). In addition to industrial and agricultural applications, the actuator is also ideal for positioning satellite dishes.

**Features and options:**
- 12/24V DC permanent magnet motor
- Max. thrust up to 6000 N (LA30LK)
- Stainless steel piston rod
- Elegant and compact construction with small installation dimensions
- Protection Class: IPX0/66
- Colour: Black
- Speed max. 65 mm/s (LA30 S-motor with 12 mm pitch)
- Low noise level
- Steel construction for all bearing parts
- Acme thread spindle for optimum efficiency
- Extra powerful motor (S-motor)
- L-motor for system actuator
- IP66 (by ordering LA30 with plastic housing)
- Double-acting brake - increased self-locking ability (LA30 with 6 or 9 mm pitch + LA30 S-motor with 6 or 9 mm pitch and LA30L) which ensures that all these types are fully self-locking
- Potentiometer for positioning the actuator 0-1 K ohm, 0-5 K ohm or 0-10 K ohm
- Reed switch (only LA30 L-motor versions): 8 pulses pr. spindle revolution
- Mechanical spline function. Safety feature by using the mechanical spline, the actuator can only push
- Safety nut (only in push)
- Terminal cover (only LA30 L-motor versions)
- Ball screw (K) (only LA30 L-motor versions)
- Ball screw and safety nut (KAS) (only LA30 L-motor versions)
- Ball screw, safety nut and splines (KSM) (only LA30 L-motor versions)

**Usage:**
- Duty cycle: 10%, 2 minutes continuous use followed by 18 minutes not in use
- Ambient temperature +5° to +40°C
- Storage temperature -40° to +70°C
- Compatible with control boxes CB8, CB12,
- Approvals: IEC 60601-1, ANSI/AAMI ES60601-1 and CAN/CSA-22.2 No 60601-1
- Should LA30 be used with a non LINAK control unit, please ask the nearest LINAK representative for further details

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### Technical specifications:

<table>
<thead>
<tr>
<th>New type</th>
<th>Spindle pitch (mm)</th>
<th>Thrust max. Push (N)</th>
<th>Thrust max. Pull (N)</th>
<th><em>Self-lock max. With/without brake (N)</em></th>
<th>Typical speed 0/full load (mm/s)</th>
<th>Stroke length (mm)</th>
<th>Typical amp. at full load 12V</th>
<th>Typical amp. at full load 24V</th>
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<td>6000/n/a</td>
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<td>-   100 150P</td>
<td>200 250 300 350 400P</td>
<td>- 4.7</td>
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</table>

The above measurements are made with the actuators connected to a stable power supply, LA30 L-motor versions with a CB12.

S = Strong motor; L = Slow motor; K = Ball screw; KAS = Ball screw, safety nut; KSM = Ball screw, safety nut, spline.
Cables:
0 = Straight with jack plug, 2.30 m with IP-housing and 2.45 m without IP-housing
1 = Straight with jack plug, 1.05 m with IP-housing and 1.20 m without IP-housing
2 = Coiled with jack plug 400 mm
3 = Coiled with jack plug 200 mm
4 = Straight without plug 500 mm (Potentiometer)
5 = Straight without plug 1200 mm (with IP66 housing)
X = Other cable / length

Protection class:
0 = IPX0
2 = IP66 with plastic house

Motor:
0 = 24V
1 = 24V 5-motor
2 = 12V 5-motor
4 = 24V L-motor for LINAK control boxes
5 = 12V motor

Stroke length:
XXX = mm
Max. with 3 & 6 mm pitch 400 mm
Max. with 9 & 12 mm pitch 500 mm
Min. 50 mm

Install. dim.:
0 = Standard
X = Other installation dimension

Options:
1 = Safety nut RECOMMENDED
0 = None
4 = Brake (not optional with K spindle)
2 = Steel spline
5 = Brake with safety nut (not optional with K spindle)
3 = Steel spline with safety nut

Colour:
- = Black

Options:
0 = None
1 = LSD (Not IPX6 max. IPX4)
2 = LS (Not IPX6 max. IPX4)

Options:
0 = None
P = Potentiometer 1 kohm
L = Potentiometer 5 Kohm
T = Potentiometer 10 Kohm
R = Reedswitch
only with motor 0, 1, 2, 4, 5
only with motor 4

Back fixture:
1 = Standard (01)
2 = Turned 90° (02)

Spindle type:
1 = 3 mm (1-thread) LA30.1
2 = 6 mm (2 thread) LA30.2
3 = 9 mm (3-thread) LA30.3
7 = 12 mm (4-thread) LA30.4
K = Ball spindle LA30K
(K spindle is always with brake)

Actuator type: LA30

General tolerance ±70 mm
N = No cable when IPX0 (except reed) (no cable relief will be mounted)
0 = Straight with jack plug, 2.30 m with IP-housing and 2.45 m without IP-housing
1 = Straight with jack plug, 1.05 m with IP-housing and 1.20 m without IP-housing
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Ordering example:
### Installation dimension:

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA30 L-motor + LA30 + LA30 S-motor with 3 or 6 mm pitch</td>
<td>S + 156 mm</td>
</tr>
<tr>
<td>LA30 with spline + LA30 S-motor with 9 mm pitch</td>
<td>S + 167 mm</td>
</tr>
<tr>
<td>LA30 with brake + LA30 S-motor with 3 or 6 mm pitch with brake</td>
<td>S + 189 mm</td>
</tr>
<tr>
<td>LA30 with ball screw and L-motor / LA30 ball screw and safety nut</td>
<td>S + 194 mm</td>
</tr>
<tr>
<td>LA30 L-motor with brake + LA30 S-motor 9 or 12 mm pitch with brake</td>
<td>S + 199 mm</td>
</tr>
<tr>
<td>LA30 L-motor with ball screw, safety nut and spline</td>
<td>S + 251 mm</td>
</tr>
</tbody>
</table>
Plastic housing for LA30:
It is possible to order a LA30 with the protection class IP66. This option requires a plastic housing. See drawings below.

The LA30 actuator is mounted with a 1.2 m / 0.5 m cable without plug.

Dimensions:

LA30 with housing mounted with LSD (protection class IPX4):
LA30 Standard:

Piston Rod eyes:

Drawing no.: LA30SNIT001B

"Crimped" piston rod eye

Piston rod without eye
(Piston rods without eyes are not tested)
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For mounting instructions and guidance in usage, please see the relevant user’s manuals.